

Name: \_\_\_\_\_ Hour: \_\_\_\_\_ **3 Forms Worksheet**  
**Three forms of quadratic equations and their characteristics – Fill in all blanks!**

**A** Standard Form:  $y = x^2 + 2x - 35$  y-intercept: \_\_\_\_\_

Factored Form: \_\_\_\_\_ x-intercept: \_\_\_\_\_

Vertex Form: \_\_\_\_\_ Vertex: \_\_\_\_\_

**B** Standard Form:  $y = x^2 + 8x$  \_\_\_\_\_ y-intercept: \_\_\_\_\_

Factored Form: \_\_\_\_\_ x-intercept: \_\_\_\_\_

Vertex Form:  $y = (x + 4)^2 - 1$  Vertex: \_\_\_\_\_

**C** Standard Form:  $y = x^2 - 8x$  \_\_\_\_\_ y-intercept: \_\_\_\_\_

Factored Form:  $y = (x - 4)(x - 4)$  x-intercept: \_\_\_\_\_

Vertex Form: \_\_\_\_\_ Vertex: \_\_\_\_\_

**D** Standard Form:  $y = -x^2 + 8x$  \_\_\_\_\_ y-intercept: \_\_\_\_\_

Factored Form: \_\_\_\_\_ x-intercept: \_\_\_\_\_

Vertex Form:  $y = -(x - 4)^2 + 1$  Vertex: \_\_\_\_\_

**E** Standard Form:  $y = -x^2 - 6x + 16$  y-intercept: \_\_\_\_\_

Factored Form: \_\_\_\_\_ x-intercept: \_\_\_\_\_

Vertex Form:  $y = -(x + 3)^2 + 25$  Vertex: \_\_\_\_\_

**F** Standard Form: \_\_\_\_\_ y-intercept: \_\_\_\_\_

Factored Form:  $y = (x - 4)(x + 4)$  x-intercept: \_\_\_\_\_

Vertex Form: \_\_\_\_\_ Vertex: \_\_\_\_\_

**G** Standard Form:  $y = x^2 - 8x + 17$  y-intercept: \_\_\_\_\_

Factored Form: \_\_\_\_\_ x-intercept: \_\_\_\_\_

Vertex Form: \_\_\_\_\_ Vertex: \_\_\_\_\_

**H** Standard Form: \_\_\_\_\_ y-intercept: \_\_\_\_\_

Factored Form:  $y = (x-3)(x-5)$  x-intercept: \_\_\_\_\_

Vertex Form: \_\_\_\_\_ Vertex: \_\_\_\_\_

**I** Standard Form:  $y = -\frac{1}{2}x^2 + 4x$  \_\_\_\_\_ y-intercept: \_\_\_\_\_

Factored Form:  $y = -\frac{1}{2}(x-3)(x-5)$  x-intercept: \_\_\_\_\_

Vertex Form: \_\_\_\_\_ Vertex: \_\_\_\_\_

**J** Standard Form:  $y = x^2$  y-intercept: \_\_\_\_\_

Factored Form: \_\_\_\_\_ x-intercept: \_\_\_\_\_

Vertex Form: \_\_\_\_\_ Vertex: \_\_\_\_\_

Write the letter that matches each graph using the equations on the previous pages.

